

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/903,806C

tggacaagtt taaccagggg atggtggaca ccgcaaagaa gaactttggc 300

ggcgggaaca cggcttggga ggaaaagacg ctgtccaagt acgagtccag 350

cgagattcgc ctgctggaga tcctggaggg gctgtgcgag agcagcgact 400

tcgaatgcaa tcagatgcta gaggcgcagg aggagcacct ggaggcctgg 450

tggctgcagc tgaagagcga atatcctgac ttattcgagt ggttttgtgt 500

gaagacactg aaagtgtgct gctctccagg aacctacggt cccgactgtc 550

tcgcatgcca gggcggatcc cagaggccct gcagcgggaa tggccactgc 600

ageggagatg ggageagaea gggegaeggg teetgeeggt geeacatggg 650

gtaccagggc ccgctgtgca ctgactgcat ggacggctac ttcagctcgc 700 tccggaacga gacccacagc atctgcacag cctgtgacga gtcctgcaag 750

acgtgctcgg gcctgaccaa cagagactgc ggcgagtgtg aagtgggctg 800

ggtgctggac gagggcgcct gtgtggatgt ggacgagtgt gcggccgagc 850

DATE: 10/07/2003 RECE TIME: 09:35:23

Input Set: A:\P1618P2C3 sequence listing.txt

OCT 15 2003

Output Set: N:\CRF4\10072003\I903806C.raw

```
TECH CENTER 1600/2900
 7 <110> APPLICANT: Chen, Jian
        Goddard, Audrey
        Gurney, Austin L.
        Hillan, Kenneth
10
11
        Pennica, Diane
        Wood, William I.
12
13
        Yuan, Jean
15 <120> TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
        Acids Encoding the Same
18 <130> FILE REFERENCE: P1618P2C3
20 <140> CURRENT APPLICATION NUMBER: US 09/903,806C
21 <141> CURRENT FILING DATE: 2001-07-11
23 <150> PRIOR APPLICATION NUMBER: US 09/665,350
24 <151> PRIOR FILING DATE: 2000-09-18
26 <150> PRIOR APPLICATION NUMBER: PCT/US00/04414
27 <151> PRIOR FILING DATE: 2000-02-22
29 <150> PRIOR APPLICATION NUMBER: PCT/US98/18824
30 <151> PRIOR FILING DATE: 1998-09-10
32 <150> PRIOR APPLICATION NUMBER: US 60/062,287
33 <151> PRIOR FILING DATE: 1997-10-17
                                                           ENTERED
35 <160> NUMBER OF SEQ ID NOS: 424
37 <210> SEQ ID NO: 1
38 <211> LENGTH: 1825
39 <212> TYPE: DNA
40 <213> ORGANISM: Homo Sapien
42 <400> SEQUENCE: 1
   actgcacctc ggttctatcg attgaattcc ccggggatcc tctagagatc 50
43
45
   cctcgacctc gacccacgcg tccgggccgg agcagcacgg ccgcaggacc 100
47
   tggageteeg getgegtett eeegeagege taeeegeeat gegeetgeeg 150
49
   51
   gccggaggcc gccaagaagc cgacgccctg ccaccggtgc cgggggctgg 250
```

53

55

57

59

61

63

65

67

69

71

73 75

RAW SEQUENCE LISTING DATE: 10/07/2003 PATENT APPLICATION: US/09/903,806C TIME: 09:35:23

Input Set: A:\P1618P2C3 sequence listing.txt
Output Set: N:\CRF4\10072003\I903806C.raw

```
77 cgcctccctg cagcgctgcg cagttctgta agaacgccaa cggctcctac 900
   acgtgcgaag agtgtgactc cagctgtgtg ggctgcacag gggaaggccc 950
   aggaaactgt aaagagtgta tctctggcta cgcgagggag cacggacagt 1000
   gtgcagatgt ggacgagtgc tcactagcag aaaaaacctg tgtgaggaaa 1050
83
   aacgaaaact gctacaatac tccagggagc tacgtctgtg tgtgtcctga 1100
87
   cggcttcgaa gaaacggaag atgcctgtgt gccgccggca gaggctgaag 1150
89 ccacagaagg agaaagcccg acacagctgc cctcccgcga agacctgtaa 1200
91 tgtgccggac ttacccttta aattattcag aaggatgtcc cgtggaaaat 1250
   gtggccctga ggatgccgtc tcctgcagtg gacagcggcg gggagaggct 1300
95 gcctgctctc taacggttga ttctcatttg tcccttaaac agctgcattt 1350
    cttggttgtt cttaaacaga cttgtatatt ttgatacagt tctttgtaat 1400
97
99
   101 aaagggcggc cgcgactcta gagtcgacct gcagaagctt ggccgccatg 1500
103
    gcccaacttg tttattgcag cttataatgg ttacaaataa agcaatagca 1550
    tcacaaattt cacaaataaa qcatttttt cactqcattc taqttqtqqt 1600
105
    ttgtccaaac tcatcaatgt atcttatcat gtctggatcg ggaattaatt 1650
107
109
    cggcgcagca ccatggcctg aaataacctc tgaaagagga acttggttag 1700
    gtaccttctg aggcggaaag aaccagctgt ggaatgtgtg tcagttaggg 1750
111
    tgtggaaagt ccccaggctc cccagcaggc agaagtatgc aagcatgcat 1800
113
115
    ctcaattagt cagcaaccca gtttt 1825
117 <210> SEQ ID NO: 2
118 <211> LENGTH: 353
119 <212> TYPE: PRT
120 <213> ORGANISM: Homo Sapien
122 <400> SEQUENCE: 2
    Met Arg Leu Pro Arg Ala Ala Leu Gly Leu Leu Pro Leu Leu
123
124
                                                             15
                                         10
126
    Leu Leu Pro Pro Ala Pro Glu Ala Ala Lys Lys Pro Thr Pro
127
                                                             30
                                         25
                     20
    Cys His Arg Cys Arg Gly Leu Val Asp Lys Phe Asn Gln Gly Met
129
130
    Val Asp Thr Ala Lys Lys Asn Phe Gly Gly Gly Asn Thr Ala Trp
132
133
                     50
                                         55
     Glu Glu Lys Thr Leu Ser Lys Tyr Glu Ser Ser Glu Ile Arg Leu
135
136
                                         70
138
    Leu Glu Ile Leu Glu Gly Leu Cys Glu Ser Ser Asp Phe Glu Cys
139
141
    Asn Gln Met Leu Glu Ala Gln Glu Glu His Leu Glu Ala Trp Trp
142
                                                            105
                     95
                                        100
144
    Leu Gln Leu Lys Ser Glu Tyr Pro Asp Leu Phe Glu Trp Phe Cys
145
                                        115
                                                            120
    Val Lys Thr Leu Lys Val Cys Cys Ser Pro Gly Thr Tyr Gly Pro
147
148
                                        130
                                                            135
    Asp Cys Leu Ala Cys Gln Gly Gly Ser Gln Arg Pro Cys Ser Gly
150
151
                                        145
                                                            150
                    140
    Asn Gly His Cys Ser Gly Asp Gly Ser Arg Gln Gly Asp Gly Ser
153
154
                    155
                                        160
156
    Cys Arg Cys His Met Gly Tyr Gln Gly Pro Leu Cys Thr Asp Cys
157
                    170
                                        175
                                                            180
```

RAW SEQUENCE LISTING DATE: 10/07/2003 PATENT APPLICATION: US/09/903,806C TIME: 09:35:23

Input Set : A:\P1618P2C3 sequence listing.txt
Output Set: N:\CRF4\10072003\I903806C.raw

```
Met Asp Gly Tyr Phe Ser Ser Leu Arg Asn Glu Thr His Ser Ile
159
160
                                                              195
                     185
                                          190
     Cys Thr Ala Cys Asp Glu Ser Cys Lys Thr Cys Ser Gly Leu Thr
162
163
                                          205
                                                               210
                     200
165
     Asn Arg Asp Cys Gly Glu Cys Glu Val Gly Trp Val Leu Asp Glu
166
                                          220
                                                               225
                     215
168
     Gly Ala Cys Val Asp Val Asp Glu Cys Ala Ala Glu Pro Pro
169
                     230
                                          235
                                                               240
171
     Cys Ser Ala Ala Gln Phe Cys Lys Asn Ala Asn Gly Ser Tyr Thr
172
                     245
                                          250
                                                               255
     Cys Glu Glu Cys Asp Ser Ser Cys Val Gly Cys Thr Gly Glu Gly
174
175
                     260
                                          265
177
     Pro Gly Asn Cys Lys Glu Cys Ile Ser Gly Tyr Ala Arg Glu His
178
                                          280
                                                               285
                     275
180
     Gly Gln Cys Ala Asp Val Asp Glu Cys Ser Leu Ala Glu Lys Thr
181
                                          295
                                                               300
                     290
183
     Cys Val Arg Lys Asn Glu Asn Cys Tyr Asn Thr Pro Gly Ser Tyr
184
                     305
                                          310
                                                               315
     Val Cys Val Cys Pro Asp Gly Phe Glu Glu Thr Glu Asp Ala Cys
186
187
                     320
                                          325
                                                               330
     Val Pro Pro Ala Glu Ala Glu Ala Thr Glu Gly Glu Ser Pro Thr
189
190
                     335
                                                               345
                                          340
192
     Gln Leu Pro Ser Arg Glu Asp Leu
193
                     350
195 <210> SEQ ID NO: 3
196 <211> LENGTH: 2206
197 <212> TYPE: DNA
198 <213> ORGANISM: Homo Sapien
200 <400> SEQUENCE: 3
     caggtccaac tgcacctcgg ttctatcgat tgaattcccc ggggatcctc 50
201
     tagagatece tegacetega eccaegegte egecaggeeg ggaggegaeg 100
203
     cgcccagccg tctaaacggg aacagccctg gctgagggag ctgcagcgca 150
205
207 gcagagtatc tgacggcgcc aggttgcgta ggtgcggcac gaggagtttt 200
     cccggcagcg aggaggtcct gagcagcatg gcccggagga gcgccttccc 250
209
    tgccgccgcg ctctggctct ggagcatcct cctgtgcctg ctggcactgc 300
211
     gggcggaggc cgggccgccg caggaggaga gcctgtacct atggatcgat 350
213
215
     gctcaccagg caagagtact cataggattt gaagaagata tcctgattgt 400
217
     ttcagagggg aaaatggcac cttttacaca tgatttcaga aaagcgcaac 450
     agagaatgcc agctattcct gtcaatatcc attccatgaa ttttacctgg 500
219
221
     caagctgcag ggcaggcaga atacttctat gaattcctgt ccttgcgctc 550
     cctggataaa ggcatcatgg cagatccaac cgtcaatgtc cctctgctgg 600
223
225
     gaacagtgcc tcacaaggca tcagttgttc aagttggttt cccatgtctt 650
227
     ggaaaacagg atggggtggc agcatttgaa gtggatgtga ttgttatgaa 700
229
     ttctgaaggc aacaccattc tccaaacacc tcaaaatgct atcttcttta 750
231
     aaacatgtca acaagctgag tgcccaggcg ggtgccgaaa tggaggcttt 800
233
     tgtaatgaaa gacgcatctg cgagtgtcct gatgggttcc acggacctca 850
235
     ctgtgagaaa gccctttgta ccccacgatg tatgaatggt ggactttgtg 900
237
     tgactcctgg tttctgcatc tgcccacctg gattctatgg agtgaactgt 950
239
     gacaaagcaa actgctcaac cacctgcttt aatggaggga cctgtttcta 1000
```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/903,806C TIME: 09:35:23

DATE: 10/07/2003

Input Set : A:\P1618P2C3 sequence listing.txt
Output Set: N:\CRF4\10072003\I903806C.raw

```
ccctggaaaa tgtatttgcc ctccaggact agagggagag cagtgtgaaa 1050
241
    tcagcaaatg cccacaaccc tgtcgaaatg gaggtaaatg cattggtaaa 1100
243
    agcaaatgta agtgttccaa aggttaccag ggagacctct gttcaaagcc 1150
245
247
    tgtctgcgag cctggctgtg gtgcacatgg aacctgccat gaacccaaca 1200
249
    aatgccaatg tcaagaaggt tggcatggaa gacactgcaa taaaaggtac 1250
251
    gaagccagcc tcatacatgc cctgaggcca gcaggcgccc agctcaggca 1300
253
    gcacacgcct tcacttaaaa aggccgagga gcggcgggat ccacctgaat 1350
255
    ccaattacat ctggtgaact ccgacatctg aaacgtttta agttacacca 1400
    agttcatagc ctttgttaac ctttcatgtg ttgaatgttc aaataatgtt 1450
257
259
    cattacactt aagaatactg gcctgaattt tattagcttc attataaatc 1500
    actgagetga tatttactet teettttaag ttttetaagt acgtetgtag 1550
261
263
    catgatggta tagattttct tgtttcagtg ctttgggaca gattttatat 1600
265
    tatgtcaatt gatcaggtta aaattttcag tgtgtagttg gcagatattt 1650
    tcaaaattac aatgcattta tggtgtctgg gggcagggga acatcagaaa 1700
267
    ggttaaattg ggcaaaaatg cgtaagtcac aagaatttgg atggtgcagt 1750
269
271
    taatgttgaa gttacagcat ttcagatttt attgtcagat atttagatgt 1800
    273
275·
    ttacactgtg gtagtggcat ttaaacaata taatatattc taaacacaat 1950
277
279
    gaaataggga atataatgta tgaacttttt gcattggctt gaagcaatat 2000
281
    aatatattgt aaacaaaca cagctcttac ctaataaaca ttttatactg 2050
    tttgtatgta taaaataaag gtgctgcttt agttttttgg aaaaaaaaa 2100
283
    aaaaaaaaa aaaaaaaaa aaaaaaaaa gggcggccgc gactctagag 2150
285
    tcgacctgca gaagcttggc cgccatggcc caacttgttt attgcagctt 2200
287
    ataatg 2206
289
291 <210> SEQ ID NO: 4
292 <211> LENGTH: 379
293 <212> TYPE: PRT
294 <213> ORGANISM: Homo Sapien
296 <400> SEQUENCE: 4
    Met Ala Arg Arg Ser Ala Phe Pro Ala Ala Ala Leu Trp Leu Trp
297
298
                                        10
300 Ser Ile Leu Leu Cys Leu Leu Ala Leu Arg Ala Glu Ala Gly Pro
301
303
    Pro Gln Glu Glu Ser Leu Tyr Leu Trp Ile Asp Ala His Gln Ala
304
                     35
                                        40
306
    Arg Val Leu Ile Gly Phe Glu Glu Asp Ile Leu Ile Val Ser Glu
307
309
    Gly Lys Met Ala Pro Phe Thr His Asp Phe Arg Lys Ala Gln Gln
310
                                        70
312
    Arg Met Pro Ala Ile Pro Val Asn Ile His Ser Met Asn Phe Thr
313
                     80
                                        85
315
    Trp Gln Ala Gly Gln Ala Glu Tyr Phe Tyr Glu Phe Leu Ser
316
                                       100
                                                          105
318
    Leu Arg Ser Leu Asp Lys Gly Ile Met Ala Asp Pro Thr Val Asn
319
                                                          120
                    110
                                       115
321
    Val Pro Leu Leu Gly Thr Val Pro His Lys Ala Ser Val Val Gln
322
                                       130
                    125
324 Val Gly Phe Pro Cys Leu Gly Lys Gln Asp Gly Val Ala Ala Phe
```

RAW SEQUENCE LISTING DATE: 10/07/2003

PATENT APPLICATION: US/09/903,806C TIME: 09:35:23

Input Set : A:\P1618P2C3 sequence listing.txt
Output Set: N:\CRF4\10072003\I903806C.raw

325					140					145					150	
327	Glu	Val	Asp	Val	Ile	Val	Met	Asn	Ser	Glu	Gly	Asn	Thr	Ile	Leu	
328					155					160					165	
330	Gln	Thr	Pro	Gln	Asn	Ala	Ile	Phe	Phe	Lys	Thr	Cys	Gln	Gln	Ala	
331					170					175					180	
333	Glu	Cys	Pro	Gly	Gly	Cys	Arg	Asn	Gly	Gly	Phe	Cys	Asn	Gl·u	Arg	
334					185					190					195	
336	Arg	Ile	Cys	Glu	Cys	Pro	Asp	Gly	Phe	His	Gly	Pro	His	Cys	Glu	
337					200					205					210	
339	Lys	Ala	Leu	Cys		Pro	Arg	Cys	Met		Gly	Gly	Leu	Cys	Val	
340	_,	_			215		_	_	_	220	_,	_	- 3		225	
342	Thr	Pro	Gly	Phe	-	Ile	Cys	Pro	Pro	_	Phe	Tyr	Gly	Val	Asn	
343	_	_	_	. .	230	~	,	m)		235	1	-	6 3	0 1	240	
345	Cys	Asp	Lys	Ala		Cys	Ser	Thr	Thr	_	Phe	Asn	GLY	GTĀ	Thr	
346	a -	D1		ъ.	245	T -	~	T 1.	^ -	250	ъ	0 1	T	C 1	255	
348	Cys	Pne	Tyr	Pro	_	ràs	Cys	тте	Cys		Pro	GLY	Leu	GIU		
349	C1	C1	C	C1	260	C	T	C	D	265	D	C	7	7\	270	
351 352	Glu	GIII	Cys	GIU	275	ser	гуѕ	Cys	Pro	280	PIO	Cys	Arg	ASII	Gly 2.85	
354	Clar	Tvc	C170	Tlo		Tvc	Sor	Tvc	Cvc		Cvc	Sor	Tuc	Cly		
355	GTĀ	гуз	Cys	TTE	290	тÃ2	ser	тур	Cys	295	Cys	ser	гу	дту	300	
357	Gln	Glv	Asp	Len		Ser	Lus	Pro	Val		Glu	Pro	Glv	Cvs	Gly	
358	OIII	ОТУ	пор	пси	305	DCI	цуз	110	Val	310	Olu	110	OTA	Cys	315	
360	Ala	His	Gly	Thr		His	Glu	Pro	Asn		Cvs	Gln	Cvs	Gln		
361	1120		011	1112	320	0	014			325	4 10	02	o j o	02	330	
363	Glv	Trp	His	Glv		His	Cvs	Asn	Lvs		Tvr	Glu	Ala	Ser		
364	- 4	_		- 1	335		4		-	340	- 2				345	
366	Ile	His	Ala	Leu	Arg	Pro	Ala	Gly	Ala	Gln	Leu	Arg	Gln	His	Thr	
367					350			_		355		_			360	
369	Pro	Ser	Leu	Lys	Lys	Ala	Glu	Glu	Arg	Arg	Asp	Pro	Pro	Glu	Ser	
370					365					370					375	
372	Asn	Tyr	Ile	Trp												
375	<210	> SE(Q ID	NO:	5											
376	<211>	> LEI	NGTH:	45												
	<212>															
	<213				Artif	ficia	al Se	equer	nce							
	<220							•								
	<223					CON:	Synt	thet	ic 0.	Ligor	nucle	eotic	de Pi	robe		
		<400> SEQUENCE: 5														
		agggagcacg gacagtgtgc agatgtggac gagtgctcac tagca 45														
		(210> SEQ ID NO: 6 (211> LENGTH: 21														
	<212>				\ ~+ i i	Ei ai a	.1 C	~~								
		2213> ORGANISM: Artificial Sequence														
	<223				ר ייי מאס		Sunt	-het i	i	Ligor	nucle	antio	do Dr	rohe		
	<400>					LOIN.	Oym	-11 C C 3		LIGOI	TUCIE	-0-1	AG E1	· ONE		
	agag	-	-			מ ר	21									
	<210>	_			-	- -										
		~>			-											

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 10/07/2003 PATENT APPLICATION: US/09/903,806C TIME: 09:35:24

Input Set : A:\P1618P2C3 sequence listing.txt
Output Set: N:\CRF4\10072003\I903806C.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

```
Seq#:13; N Pos. 33,37,80,94,144,188
Seq#:26; N Pos. 21
Seq#:50; N Pos. 61
Seq#:113; N Pos. 1461
Seq#:131; N Pos. 1837
Seq#:174; N Pos. 1683
Seq#:175; Xaa Pos. 539
Seq#:206; N Pos. 973,977,996,1003
Seq#:424; Xaa Pos. 1,3,4,5,6,7,8,9,11,12,13,14,15,17,18,19,20,21,22,23,24
Seq#:424; Xaa Pos. 25,26,28,30,31,32,33,34,36,37,39
```

VERIFICATION SUMMARY

DATE: 10/07/2003 TIMÉ: 09:35:24 PATENT APPLICATION: US/09/903,806C

Input Set : A:\P1618P2C3 sequence listing.txt Output Set: N:\CRF4\10072003\I903806C.raw

L:585 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0 M:341 Repeated in SeqNo=13 L:902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0 L:2087 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:50 after pos.:50 L:4499 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:113 after pos.:1450 L:5070 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:131 after pos.:1800 L:6720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:174 after pos.:1650 L:6896 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:175 after pos.:525 L:8258 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:206 after pos.:950 M:341 Repeated in SeqNo=206 L:15200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:424 after pos.:0 M:341 Repeated in SeqNo=424